WHAT IS CLAIMED IS:

1. A laminated semiconductor ceramic element comprising alternate semiconductor ceramic layers and internal electrode layers, the semiconductor ceramic layers being of a semiconductor ceramic comprising barium titanate, and an external electrode formed so as to be connected electrically with the internal electrode layers,

wherein the semiconductor ceramic contains the element nickel at about 0.2 mol% or less (excluding 0 mol%).

- 2. The laminated semiconductor ceramic element according to claim 1, wherein the semiconductor ceramic contains the element boron at about 0.2 to 20 mol%.
- 3. A production method for a laminated type semiconductor ceramic element comprising the steps of:

providing a laminated product of semiconductor material layers comprising barium titanate and about 0.2 mol% or less (excluding 0 mol%) of the element nickel, and internal electrode layers,

obtaining a laminated sintered compact by reduction baking of the laminated product,

forming an external electrode electrically connected to an internal electrodes of the laminated sintered compact, and

re-oxidization processing of the laminated sintered compact.

4. The production method of claim 3, wherein the laminated product comprises the element boron at about 0.2 to 20 mol%.